

Week-8
LAB-4

```
import java.util.Scanner;  
abstract class Shape {  
    double d1;  
    double d2;  
    Shape(double a, double b) {  
        d1 = a;  
        d2 = b;  
    }  
    abstract void printarea();  
}  
class Rectangle extends Shape {  
    Rectangle(int a, int b) {  
        super(a, b);  
    }  
    void printarea() {  
        double area = d1 * d2;  
        System.out.println("Area of rectangle: " + area);  
    }  
}  
class Triangle extends Shape {  
    Triangle(int a, int b) {  
        super(a, b);  
    }  
    void printarea() {  
        double area = d1 * d2 / 2;  
        System.out.println("Area of triangle: " + area);  
    }  
}
```

```

class Circle extends Shape {
    circle(double rad) {
        super(rad, rad);
    }
    void printArea() {
        double area = 3.14 * rad * rad;
        System.out.println("Area of circle is " + area);
    }
}

class Main {
    public static void main (String args[]) {
        Scanner xx = new Scanner(System.in);
        for (;;) {
            System.out.println("Enter ur choice");
            System.out.print("\n1: rectangle\n2: triangle\n3: circle\n");
            int ch = xx.nextInt();
            switch(ch) {
                case 1: System.out.println("Enter breadth & length of rectangle");
                    int x = xx.nextInt();
                    int y = xx.nextInt();
                    Rectangle r = new Rectangle(x, y);
                    x = printArea();
                    break;
                case 2: System.out.println("Enter base & height of triangle");
                    int b = xx.nextInt();
                    int h = xx.nextInt();
            }
        }
    }
}

```

```
Triangle t = new Triangle(z, w);  
t.printArea();
```

```
break;
```

```
Case 3 : System.out.println("Enter radius of  
circle");
```

```
double rad = xx.nextInt();
```

```
Circle c = new Circle(rad);
```

```
c.printArea();
```

```
break;
```

```
}
```

```
}
```

```
}
```

```
}
```


Week-8
LAB-5

```
import java.util.Scanner;
abstract class Account {
    String cName, accType;
    long accNo;
    double bal;
    final double minBal = 100000;
    Account(String cName, long accNo, double bal,
            String accType) {
        this.accNo = accNo;
        this.cName = cName;
        this.bal = bal;
        this.accType = accType;
    }
    abstract void addBal(double amt);
    abstract void dispBal();
    abstract void withBal(double amt);
}

class curr-acc extends Account {
    curr-acc(String cName, long accNo, double bal) {
        super(cName, accNo, bal, "current");
        System.out.println("Name: " + cName + "\t"
            + "accNo: " + accNo + " bal: " +
            bal + " type: " + accType);
    }
    void addBal(double amt) {
        this.bal += amt;
    }
    void display() {
        System.out.println("Your Balance is: " + this.bal);
    }
}
```

```

void withBal (double amt) {
    this.bal -= amt;
    checkBal();
}

```

```

void checkBal () {
    if (this.Bal < minBal) {
        this.bal -= this.bal * 0.02;
        System.out.println(" Avail. Balance : " + this.
            bal);
    }
}

```

```

}
}
class Sav-acct extends Account {
    Sav-acct (String cname, long accno, double bal) {
        super (cname, accno, bal, "Savings");
    }
}

```

```

void addBal (double amt) {
    this.bal += amt;
    addInt();
}

```

```

void addIntx () {
    this.bal += this.bal * 0.07;
}

```

```

void dispbal () {
    System.out.print (" balance : " + this.bal);
}

```

```

void withBal (double amt) {
    this.bal -= amt;
}
}

```

```

}

```



```

class AccountMain {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        Double amt;
        int flag = 0;
        while (flag == 0) {
            System.out.println("1: current ac. 2: savings");
            int ch = sc.nextInt();
            Switch (ch) {

```

case 1 :

```

            System.out.println("Enter name & acc
            no. of the customer");

```

```

            String name = sc.next();

```

```

            long account-no = sc.nextLong();

```

```

            curr-acct c = new curr-acct(name,
            account-no, 50000);

```

```

            System.out.println("\n (current-acct)");

```

```

            int flag1 = 0;

```

```

            while (flag1 == 0) {

```

```

                System.out.println("1: Add amount
                2: Display Balance 3: Withdra
                -w");

```

```

                int ch1 = sc.nextInt();

```

```

                Switch (ch1) {

```

case 1 :

```

                System.out.println("Enter amt to
                be added:");

```

```

                amt = sc.nextDouble();

```

```

                c.addBal(amt);

```

```

                break;

```

Case 2:

c.dispBal();

break;

Case 3:

System.out.println("Enter amt to be
withdraw:");

amt = sc.nextDouble();

c.withBal(amt);

break;

default:

flag1 = 1;

}

}

break;

Case 2:

System.out.println("Enter the name & acc no.
of the customer:");

String name1 = sc.next();

long account_no2 = sc.nextLong();

Sav_acc t s = new Sav_acct(name1,
account_no2, 40000);

System.out.println("\n Savings - acct \n");

int flag2 = 0;

while (flag2 == 0) {

System.out.println("1: AddBal \n 2:

DisplayBal \n 3: Withdraw");

int ch2 = sc.nextInt();

Switch(ch2) {

Case 1:

System.out.println("Enter amt to be
added:");


```
amt = Sc.nextDouble();  
S.addBal(amt);  
break;
```

Case 2;

```
S.dispBal();  
break;
```

Case 3:

```
System.out.println("Enter amt to be  
withdrawn:");
```

```
amt = Sc.nextDouble();  
S.withBal(amt);  
break;
```

```
default:  
flag2 = 1;
```

```
}
```

```
}
```

```
}
```

```
}
```

```
}
```

```
}
```